

Appl. No. 09/866,434
Amdt. Dated Sep. 25, 2003
Reply to Office Action of Jul. 16, 2003

Am ndments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claim 1 (currently amended): A low cost, high reliability interposer for use in electronic packages, comprising:

- a) at least one dielectric layer having one major surface and at least one edge;
- b) a plurality of conductive pads, each having a first and second surface, spaced apart on said major surface of said at least one dielectric layer, said first surface of said conductive pads being plated with at least one layer of metal, and at least a portion of said second surface of said conductive pads being readily adaptable for connection to a conductive member;
- c) a plurality of openings disposed in the interposer, said openings having a ~~non-uniform~~ stepped cross section, each opening corresponding to and aligned with one of said conductive pads; and
- d) a plurality of reformable conductive members, each one located within one of said openings of said interposer and in electrical contact with said portion of said second surface of said conductive pads.

Claim 2 (original): The interposer as recited in claim 1, wherein said at least one dielectric layer comprises an insulative material.

Claim 3 (original): The interposer as recited in claim 2, wherein said insulative material is polyimide.

Claim 4 (original): The interposer as recited in claim 2, wherein said insulative material is a liquid crystal polymer.

Claim 5 (original): The interposer as recited in claim 2, wherein said insulative material is epoxy-glass-based.

Claim 6 (original): The interposer as recited in claim 2, wherein said insulative material has a coefficient of thermal expansion (CTE) that substantially matches the CTE of the material to which it is to be attached.

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Claim 7 (original): The interposer as recited in claim 1, wherein said conductive pads comprise copper.

Claim 8 (original): The interposer as recited in claim 1, wherein said first surface of said conductive pads being plated with at least one layer of metal is plated with nickel.

Claim 9 (original): The interposer as recited in claim 8, wherein said first surface of said conductive pads being plated with at least one layer of metal is also plated with gold.

Claims 10 - 11 (canceled)

Claim 12 (original) The interposer as recited in claim 1, wherein said conductive members comprise solder.

Claim 13 (original) The interposer as recited in claim 1, wherein said conductive members are comprised of conductive paste.

Claim 14 (original) The interposer as recited in claim 13, wherein said conductive paste comprises solder paste.

Claim 15 (original) The interposer as recited in claim 1, further comprises alignment means to align said carrier to a structure adapted to mate therewith.

Claim 16 (original) The interposer as recited in claim 1, wherein said interposer may be attached to a structure adapted to mate therewith by a reflow process.

Claim 17 (original) The interposer as recited in claim 16, wherein said reflow process of said interposer to said structure is performed under uniform pressure.

Claims 18 - 34 (canceled)